AMENDMENTS TO THE CLAIMS:

1.(previously presented): A mobile station, for use in a CDMA communications network, comprising:

wanted signal processing portion which an input signal, representing a CDMA transmission signal received at the mobile station from a base station of the network, to derive therefrom a wanted signal embodying a preselected spreading code;

a code information receiving portion which receives from the base station code information identifying a further spreading code assigned by the network to an interfering signal of another network user; and

an interfering signal processing portion which employs the further spreading code identified by the received code information to reduce the interference effect of that interfering signal on the derived wanted signal.

2.(currently amended): A mobile station as claimed in claim 1, wherein:

said code information receiving portion is operable to receive from the base station a plurality of items of code information corresponding respectively to a plurality of such interfering signals, each such item identifying a spreading code assigned by the network to its corresponding interfering signal; and

said interfering signal processing portion is operable to employ the spreading codes identified by the received items to reduce the interference effect on the derived wanted signal of each of the ~~interfering signals of said~~ plurality of interfering signals.

3.(currently amended): A mobile station as claimed in claim 1, wherein said input signal of the wanted signal processing portion is pre-processed by the interfering signal processing portion to reduce or cancel components in the input signal associated with ~~the or~~ each said interfering signal.

4.(currently amended): A mobile station as claimed in claim 3, wherein said interfering signal processing portion is operable to derive, for ~~the or~~ each said interfering signal, a corresponding interference cancellation signal representative of a component in said input signal associated with that interfering signal.

5.(currently amended): A mobile station as claimed in claim 4, wherein said interfering signal processing portion is operable to subtract ~~the or~~ each said interference cancellation signal from a signal representing the received CDMA transmission signal to produce said input signal of the wanted signal processing portions.

6.(currently amended): A mobile station as claimed in claim 4, wherein said interfering signal processing portion is operable to derive ~~the or~~ each said corresponding interference cancellation signal from a signal representing said received CDMA transmission signal.

7.(currently amended): A mobile station as claimed in claim 4, wherein said interfering signal processing portion has, for ~~the or~~ each said interfering signal, a corresponding

processing unit for deriving said interference cancellation signal corresponding to that interfering signal, which processing unit comprises:

a code generator which generates the identified spreading code assigned to said interfering signal;

a despreader connected for receiving a first signal representing the received CDMA transmission signal and also connected to said code generator for receiving the generated spreading code, and operable to despread ~~that~~ the first signal to produce a second signal representing said interfering signal; and

a respreader connected to said despreader for receiving therefrom said second signal and also connected to said code generator for receiving the generated spreading code, and operable to respread said second signal to produce said corresponding interference cancellation signal.

8.(currently amended): A mobile station as claimed in claim 4, wherein said interfering signal processing portion further comprises:

a signal delay element connected for receiving a basic signal representing said received CDMA transmission signal and operable to delay ~~that~~ the signal by a preselected delay time to produce a delayed version thereof, said input signal of ~~the or~~ each said processing unit being provided directly by, or being derived from, said basic signal; and

a subtractor connected for receiving said delayed version of said basic signal and ~~the or~~ each said interference cancellation signal, and operable to produce said input signal of said wanted signal processing portion in dependence upon the difference between said delayed version and ~~the or~~ each interference cancellation signal.

9.(previously presented): A mobile station as claimed in claim 1, wherein one or both of said wanted signal processing portion and said interfering signal processing portion comprise(s) a RAKE receiver having a plurality of fingers for processing different respective paths of the received CDMA transmission signal.

10.(currently amended): A mobile station as claimed in claim 9, wherein each of said wanted signal processing portion and said interfering signal processing portion comprises ~~such a~~ the RAKE receiver, and said mobile station further comprises:

a path searcher connected to said wanted signal processing portion and to said interfering signal processing portion for supplying the same path information thereto; and

a path information delay element connected between said path searcher and said wanted signal processing portion for delaying supply of the path information to the wanted signal processing portion for a preselected delay time after the same path information is supplied to said interfering signal processing portion.

11.(previously presented): A mobile station as claimed in claim 1, wherein said code information receiving portion is operable to receive said code information via a common control channel broadcast by the base station to all mobile stations in its area.

12.(previously presented): A mobile station as claimed in claim 1, wherein said code information receiving portion is operable to receive said code information via a control channel associated individually with the mobile station.

13.(currently amended): A mobile station as claimed in claim 1, wherein said base station is operable to form respective beams for directing its CDMA transmission signals towards their respective users and is also operable to transmit to said mobile station interference judgement information providing, for each of a plurality of users operating in its area, information relevant to assessing an interference effect on the wanted signal of said mobile station of an interfering signal of the user concerned;

said mobile station comprising:

an interfering signal assessment portion which assesses ~~assessing~~ said interference effect of the interfering signal of each user of said plurality based on the received interference judgement information; and

an interfering signal selection portion which selects ~~selecting~~ one or more of the interfering signals from amongst the respective interfering signals of the ~~users of said~~ plurality of users based on the results of the assessment.

14.(previously presented): A mobile station as claimed in claim 13, wherein said interference judgement information for such a user of said plurality includes position information of that user.

15.(currently amended): A mobile station as claimed in claim 13, wherein said interference judgement information for ~~such~~ a user of said plurality of users includes angular position information of the user relative to the base station.

16.(currently amended): A mobile station as claimed in claim 13, wherein said interference judgement information for ~~such~~ a user of said plurality of users includes downlink transmission power level information of ~~that~~ the user.

17.(currently amended): A mobile station as claimed in claim 13, wherein said interfering signal assessment portion ~~take~~ takes account of the position of each ~~user~~ of said plurality of users relative to the position of the mobile station in assessing said interference effect.

18.(currently amended): A mobile station as claimed in claim 13, wherein said interfering signal assessment portion include storage which stores ~~storing~~ the received interference judgement information for each ~~user~~ of said plurality of users.

19.(currently amended): A mobile station as claimed in claim 13, wherein the ~~users of said~~ plurality of users are users whose downlink transmission rates exceed a predetermined threshold value.

20.(currently amended): Abase station, for use in a CDMA communications network, comprising:

an interfering signal designating portion which designates at least one of a plurality of downlink signals transmitted by the base station as being an interfering signal having an interference effect on a wanted signal of a subject mobile station of the network; and

a code information transmission portion which includes, in a predetermined control signal transmitted by the base station to said subject mobile station, code information,

identifying a spreading code assigned by the network to the designated interfering signal, for use by the subject mobile station to reduce said interference effect of said interfering signal on [[its]] said wanted signal.

21.(previously presented): A base station as claimed in claim 20, wherein said predetermined control signal is broadcast by the base station to all mobile stations in its area using a common control channel.

22.(previously presented): Abase station as claimed in claim 20, wherein said predetermined control signal is transmitted by the base station to said subject mobile station using a control channel associated individually with that mobile station.

23.(currently amended): A base station as claimed in claim 20, further comprising:

an interfering signal assessment portion which assesses, for each of a plurality of users operating in the area of the base station, said interference effect on said wanted signal of said subject mobile station of the downlink signal of the user concerned; said interfering signal designating portion being operable to determine which downlink signals of the ~~users of said~~ plurality of users are to be designated as ~~such~~ interfering signals based on the results of the assessment.

24.(previously presented): A base station as claimed in claim 23, wherein said interfering signal assessment portion is operable to assess said interference effect in dependence upon the bit rate of the downlink signal.

25.(previously presented): A base station as claimed in claim 20, wherein said base station further comprises a beamformer which forms respective beams for directing its CDMA transmission signals towards their respective users.

26.(currently amended): A base station as claimed in claim [[25]] 23, wherein said interfering signal assessment portion is operable to assess said interfering effect in dependence upon a position of the user relative to said subject mobile station.

27.(currently amended): A base station as claimed in claim [[25]] 23, wherein said interfering signal assessment portion is operable to assess said interference effect in dependence upon one or more of the following criteria:

an angular position of the user relative to said base station;

an angular position of said subject mobile station relative to the base station;

a distance of the user from the base station;

a distance of the subject mobile station from the base station;

a downlink transmission power level of the user;

and

a downlink-signal bit-rate of the user.

28.(previously presented): A base station as claimed in claim 20, further comprising:

a beamformer which forms respective beams for directing its CDMA transmission signals towards their respective users;

an interference judgement information transmission portion which includes, in a predetermined control signal transmitted by the base station to said subject mobile station, interference judgement information providing, for each of a plurality of users operating in the area of the base station, information relevant to assessing an interference effect on said wanted signal of the downlink signal of the user concerned.

29.(currently amended): A base station as claimed in claim 28, wherein said interference judgement information for ~~such~~ a user of said plurality of users includes position information of that user.

30.(currently amended): A base station as claimed in claim 28, wherein said interference judgement information for ~~such~~ a user of said plurality of users includes angular position information of the user relative to the base station.

31.(currently amended): A base station as claimed in claim 28, wherein said interference judgement information for ~~such~~ a user of said plurality of users includes downlink transmission power level information of that user.

32.(previously presented): A CDMA communications network comprising:

a mobile station; and

a base station operable to designate at least one of a plurality of downlink signals transmitted thereby as being an interfering signal having an interference effect on a wanted signal of said mobile station, and also operable to include, in a predetermined control

signal transmitted thereby to said mobile station, code information identifying a spreading code assigned by the network to the designated signal;

the mobile station being operable to receive said predetermined control signal and to employ said spreading code identified by the code information included in that signal to reduce said interference effect of that interfering signal on said wanted signal.

33.(previously presented): A receiving method, for use in a mobile station of CDMA communications network, comprising:

receiving a CDMA transmission signal from a base station of the network;

processing an input signal representing the received CDMA transmission signal to derive therefrom a wanted signal embodying a preselected spreading code;

receiving from the base station code information identifying a further spreading code assigned by the network to an interfering signal of another network user; and

employing the further spreading code identified by the received code information to reduce the interference effect of that interfering signal on the derived wanted signal.

34.(previously presented): A transmission method, for use in a base station of a CDMA communications network, comprising:

designating at least one of a plurality of downlink signals transmitted by the base station as being an interfering signal having an interference effect on a wanted signal of a subject mobile station of the network; and

including, in a predetermined control signal transmitted by the base station to the subject mobile station, code information, identifying a spreading code assigned by the network to

the designated interfering signal, for use by the mobile station to reduce said interference effect of said interfering signal on its said wanted signal.

35.(previously presented): A CDMA communications method, comprising:

designating at least one of a plurality of downlink signals transmitted by a base station of the network as being an interfering signal having an interference effect on a wanted signal of a subject mobile station of the network;

including, in a predetermined control signal transmitted by the base station to the subject mobile station, code information identifying a spreading code assigned by the network to the designated interfering signal;

receiving the predetermined control signal at the mobile station and employing the spreading code identified by the code information included in that signal to reduce the interference effect on the wanted signal of that interfering signal.

36.(previously presented): A mobile station, for use in a CDMA communications network, comprising:

wanted signal processing means for processing an input signal, representing a CDMA transmission signal received at the mobile station from a base station of the network, to derive therefrom a wanted signal embodying a preselected spreading code;

code information receiving means for receiving from the base station code information identifying a further spreading code assigned by the network to an interfering signal of another network user; and

interfering signal processing means for employing the further spreading code identified by the received code information to reduce the interference effect of that interfering signal on the derived wanted signal.

37.(previously presented): A base station, for use in a CDMA communications network, comprising:

interfering signal designating means for designating at least one of a plurality of downlink signals transmitted by the base station as being an interfering signal having an interference effect on a wanted signal of a subject mobile station of the network; and

code information transmission means for including, in a predetermined control signal transmitted by the base station to said subject mobile station, code information, identifying a spreading code assigned by the network to the designated interfering signal, for use by the subject mobile station to reduce said interference effect of said interfering signal on its said wanted signal.